

DeltaV™ Integrated Patch Management



Keep your DCS updated with the latest patches, hotfixes, and antivirus definitions with Emerson's DeltaV™ Integrated Patch Management.

- Apply critical updates consistently and efficiently
- Uniquely designed for DeltaV™ Distributed Control Systems
- Minimize personnel time and reduce manual tasks
- Eradicate critical vulnerabilities and enhance system availability

Introduction

Keeping software and network-connected devices patched and updated is crucial for safeguarding against potential security vulnerabilities, preventing cyberattacks, and ensuring data privacy. Critical patches, antivirus definitions,

and application hotfix updates are frequently left uninstalled for extended periods or not at all due to limited resources or more focus on other immediate operational needs. Consequently, known vulnerabilities remain exposed, significantly increasing the risk of disruption caused by cyberattacks.

DeltaV™ Integrated Patch Management for DeltaV Distributed Control Systems (DCS) ensures efficient delivery of critical updates to your control system, eradicating critical vulnerabilities and enhancing overall system availability while minimizing site personnel's time. Additionally, maintaining up-to-date software enhances system performance and functionality, contributing to a seamless and secure user experience. Integrated Patch Management uses the latest cybersecurity standards to ensure patches are securely identified, acquired, distributed, and installed for the DCSs in your organization.

DeltaV Integrated Patch Management is designed to leverage your investment with Emerson's Guardian platform and DeltaV Product Support to streamline the check, download, and installation of the latest Microsoft® Windows™ patches, Trellix™ antivirus definitions, and DeltaV DCS hotfixes.

With Integrated Patch Management, OT and other cybersecurity personnel have full visibility and control over each step of the process. The intuitive dashboard allows you to check for updates, monitor and evaluate overall node status, and remotely install updates as desired. This ensures updates are being applied per your patch management program policies and adhering to IEC 62443-2-3 recommendations.

Benefits

Apply critical updates consistently and efficiently:

Running a successful patch management program can take a significant effort, e.g., efforts to review which updates are required, download them, securely transfer them to the endpoints, and install them. Integrated Patch Management automates these efforts, greatly increasing efficiency, all while maintaining a consistently secure system using encrypted communications between cloud servers and your site and with signed and hashed binaries that are automatically checked.

Uniquely designed for the DeltaV DCS: Integrated Patch Management is purpose-built for the DeltaV DCS and can leverage the Guardian platform and DeltaV Product Support offerings (sold separately). Similar to how the Guardian Portal and system registration files are utilized to identify relevant updates and patches, Integrated Patch Management collects system information and assesses which necessary updates your system requires. Additionally, Integrated Patch Management provides administrators with visibility into the patch status of all machines on their DeltaV DCS and safety instrumented systems (SIS). It helps quickly identify systems with pending updates and indicates which patches will require system reboots. Once updates are distributed to the DeltaV workstations, notifications can be shown on the DeltaV Desktop to alert users that an important update is ready to be installed on their workstations.

Minimize personnel time and reduce manual tasks:

The entire process of successfully patching even a single workstation can take hours. Much of that time is spent upfront, determining which updates are required and how to transfer those updates to the endpoints securely.

Integrated Patch Management significantly reduces the effort, freeing up valuable time for other site needs.

Eradicate critical vulnerabilities and enhance system availability: Emerson provides monthly approved Microsoft Windows security updates, antivirus definitions, and DeltaV DCS hotfixes. Our experience shows that promptly applying the relevant patches could have prevented many disruptive events reported to the Emerson Global Service Center.

Software Description

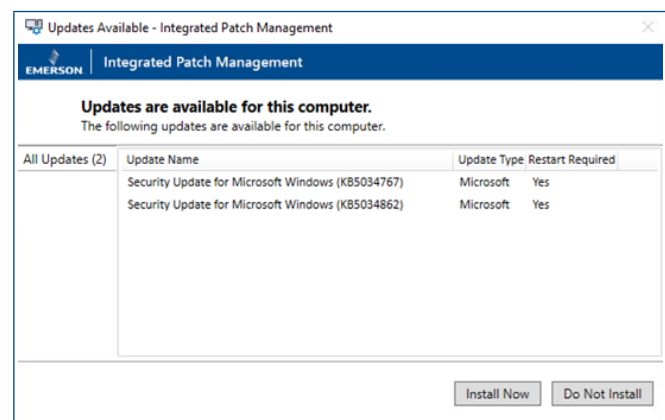


Figure 1. Pending Updates on a DeltaV Workstation.

Easily obtain the latest security patches: Use the Check for Updates button on the dashboard and have Integrated Patch Management do the heavy lifting. Check for Updates requests each endpoint for an updated inventory of its patch installation status, builds an encrypted and comprehensive report, communicates with the Guardian Portal to reconcile this report with patches that are missing, securely download required patches, and distribute them to the endpoints for installation when it is convenient.

Monitor and Control from the Dashboard: From any of the stream servers (discussed in the Architecture section), the Integrated Patch Management dashboard is available. The dashboard shows the current patch installation status for all the endpoints for which this stream server is responsible and can allow administrators to remotely install patches if desired.

Installing Patches: From the dashboard, prompt users to install available patches, allowing them to Install Now or Do Not Install. If patches must be installed now, administrators can turn on the remote installation option to begin the installation on the station without user acknowledgment.

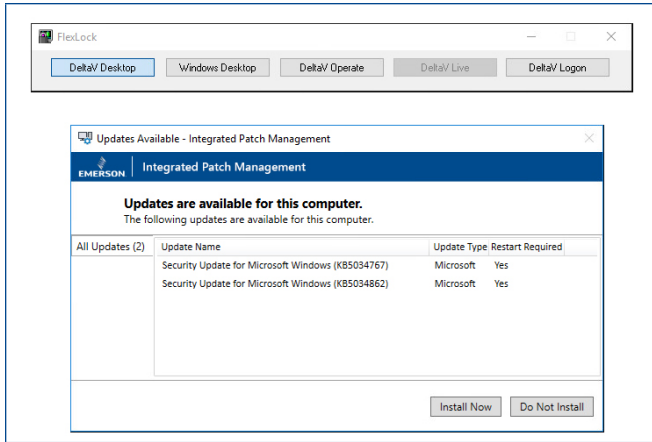


Figure 2. Install Patches directly from the DeltaV Desktop.

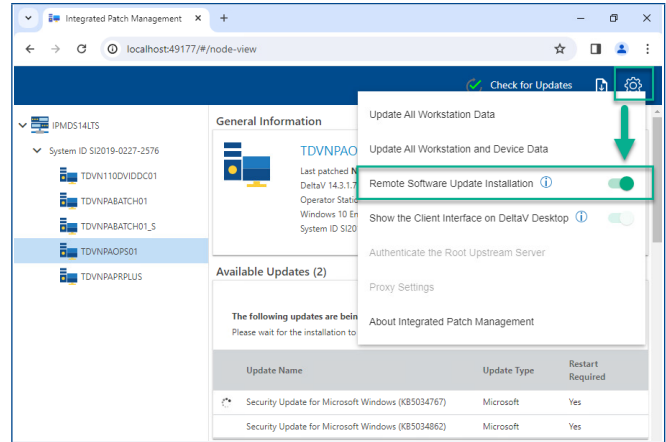
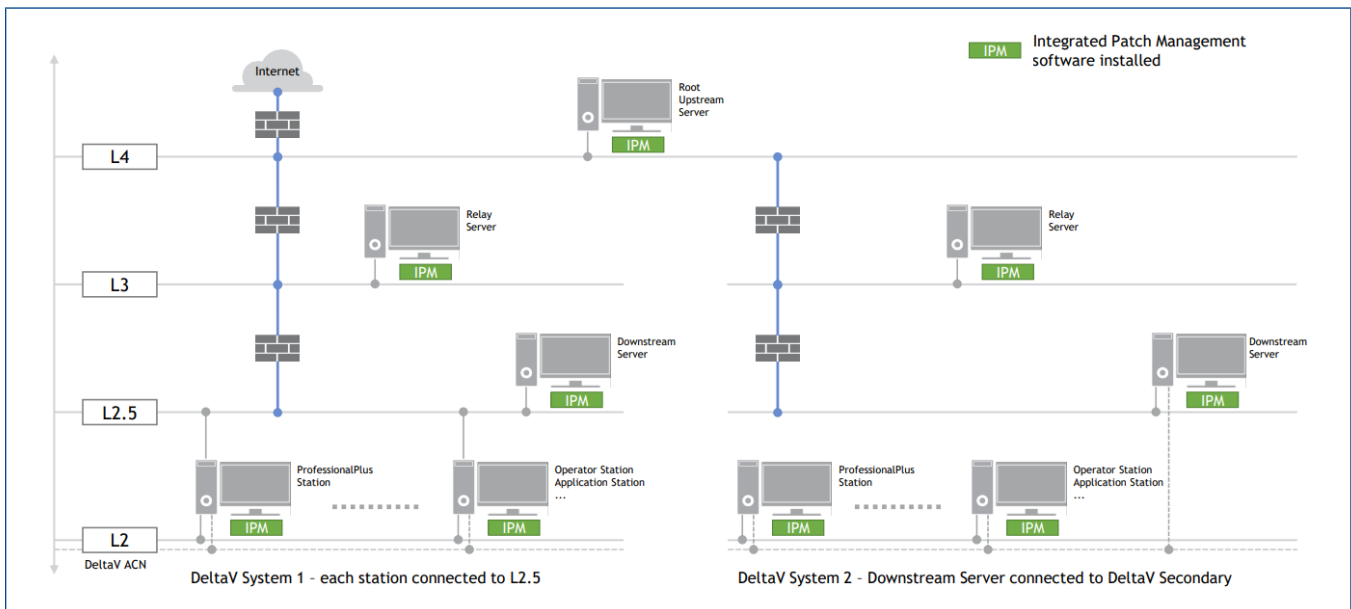


Figure 3. Remotely Install Patches from the Dashboard.

Architecture

Integrated Patch Management is designed to flexibly meet your network segmentation requirements.



Example Architecture.

Integrated Patch Management Root Upstream Server: Using innovative Emerson software to evaluate the status of endpoints and check for updates from Emerson’s Content Server, the root upstream server solicits system hotfixes (DeltaV DCS Product Support subscription required), Trellix antivirus definitions, and Windows security updates via the Internet. This software must be on an internet-facing server.

Integrated Patch Management Relay Server: This server is only necessary for specific architectures; it provides flexibility for different network segmentation

requirements. One Relay Server can support multiple Downstream Servers.

Integrated Patch Management Downstream Server: This server transfers new DeltaV hotfixes for active DeltaV DCS Product Support subscriptions, the latest Microsoft security updates, and Trellix antivirus definitions from the internet-facing Upstream Server (or Relay servers) to the endpoints to be patched. One Downstream Server can support multiple DeltaV systems.

Operational Requirements

DeltaV DCS version 14.LTS, all version 14 Features Packs, version 15.LTS, or version 15 Feature Pack 1 is required. Integrated Patch Management can be installed on Windows 10, Server 2016, and Server 2022.

License Metric

Integrated Patch Management is licensed per node and DeltaV system ID as captured by the System Registration Utility.

License Term

Integrated Patch Management software is a subscription offering with a base term length of 60 months. Term lengths of 12 months and 36 months are also available. Longer-term lengths benefit from price incentives. The subscription start date is determined based on the date the license was generated or 60 days after the order was placed, whichever is earlier.

Ordering Information

Description	Model Number
DeltaV Integrated Patch Management Subscription	Please Contact Your Local Emerson Sales Office.

Trial License

A fully featured trial license is available for DeltaV Integrated Patch Management. The trial license activates the software for three months for a single DeltaV system. Only one trial can be purchased per customer. The trial license cannot be renewed, extended, or transferred once activated.

Compatibility with DeltaV Predictive Maintenance

Beginning with Integrated Patch Management v1.4 and DeltaV Predictive Maintenance v1.4, these solutions are supported to be co-deployed on a DeltaV DCS.

Software Support

Standard basic support, including 24/7 call support, hotfixes, and minor software updates, is included.

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